REMARKS:

I. Status of the Application:

In the Office Action mailed March 24, 2006 (the "Office Action"): (1) claims 1 – 8, 12 – 14, and 16 were objected to under Section 112 for lack of antecedent basis (Office Action points 2 and 3); and (2) claims 1 – 17 were rejected under Section 102(b) as being anticipated by Renard et al. U.S. Patent Application Publication No. 2002/0083305 (hereinafter referred to as "Renard" or the "Renard reference") (Office Action points 4 and 5).

Upon entry of this amendment, claims 1, 3 – 11, and 13 - 17 have been amended, with claims 1 – 17 remaining pending. Each of the independent claims 1, 9 and 11 have been amended to be more specific in differentiating the claimed invention from the prior art.

Applicants respectfully traverse the rejection of claims 1 – 179 under Section 102 (and Section 103). Applicants respectfully request reconsideration of the pending claims in view of the foregoing amendments and the following remarks.

II. The Objection to Claims 1 – 8, 12 – 14, and 16 Should be Withdrawn:

In the Office Action, claims 1 – 8, 12 – 14, and 16 were objected to because of lack of antecedent basis (Office Action points 2 and 35). Claims 1 has now been amended to correct this error, as marked above. Accordingly, applicants respectfully request withdrawal of the objections to claims 1 – 8, 12 – 14, and 16.

III. The Rejections under 35 USC §102(b) Should Also be Withdrawn:

In the Office Action, claims 1 – 17 were rejected under Section 102(b) as being anticipated by Renard. For the reasons stated below, Applicants respectfully traverse the rejection of these claims under Section 102 and request that the Examiner withdraw the rejection of these claims and further allow all remaining claims 1 – 17.

Independent claims 1, 9, and 11 have been amended to include a configurable finite state machine (Specification, paragraph 18). In addition, independent claim 1 has been amended to include a configuration circuit (110, Figure 1 and Specification, paragraphs 18 and 21) to configure the configurable finite state machine.

Independent claims 9 and 11 have been amended to provide that the configurable finite state machine executes in parallel with other, non-FSM processing circuitry (Specification, paragraph 28) to perform a function, such as an instruction or general-purpose processor, an ALU, and so on. (Corresponding support for these amendments is indicated above parenthetically.) Other amendments to dependent claims have been made to more distinctly claim the invention.

The use of a configurable finite state machine, as claimed, provides distinct advantages. For example, the same configurable finite state machine may then implement a plurality of different functions. In addition, the configurable finite state machine may be configured in advance through use of an earlier instruction, for later use by a different microinstruction (Specification, paragraph 21 and amended claim 5).

It is respectfully submitted that the Renard reference does not disclose and does not suggest these claimed features of the present invention. For example, the cited references do not disclose and do not suggest, alone or in combination with each other, use of a configurable finite state machine for code execution, control of the configuration by an FSM configuration circuit, configuration of the configurable finite state machine in advance by an earlier instruction, and concurrent or parallel operation of the configurable finite state machine with other processing circuitry.

The Renard reference does not utilize any type of configurable finite state machine. Rather, the Renard reference solely utilizes a non-configurable finite state machine solely for "unrolling" nested loop operations in conjunction with a loop control unit (Renard paragraphs 19 and 23), using a single, very long instruction for the nested loops (Renard paragraph 16). There is no mention and no suggestion in Renard concerning configuring a configurable finite state machine for more than one type of operation, controlling the configuration through dedicated configuration circuitry, and operating the configurable finite state machine in parallel with other processing circuitry to implement the functions of the microinstruction. As a consequence, Renard does not disclose or suggest the claimed features of the present invention.

The other two cited references, Weigand et al. U.S. Patent No. 5,822,308 and Barroso et al. U.S. Patent No. 6,675,265 also do not disclose or suggest such use and configuration of configurable finite state machines. Weigand is directed toward a

multitask sequencer for a TDMA burst mode controller, while Barroso is directed toward multiprocessor cache coherence. Neither reference is concerned with configurable computing or use of a configurable finite state machine for control code execution.

As a consequence, the Renard reference, alone or in combination with the other cited references, does not disclose and does not suggest these claimed features of the present invention. In addition, there is no motivation to combine these references. The mere fact that the references could be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). In addition, identification of any individual part claimed is insufficient to defeat patentability of the whole claimed invention. See *In re Kotzab*, 217 F.3d 1365 (Fed. Cir. 2000). Accordingly, no *prima facie* showing of potential anticipation or obviousness has been made, and any assertions to the contrary have been clearly rebutted. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998); *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). The rejection of independent claims 1, 9 and 11 as anticipated under Section 102 (or as obvious under Section 103), therefore, should be withdrawn.

As a consequence, the cited references do not disclose and do not suggest the present invention. The present invention, therefore, is not anticipated (and is not rendered obvious) by these references under Section 102 (and Section 103), and the rejection of the claims should be withdrawn. In addition, because the remaining dependent claims incorporate by reference all of the limitations of the corresponding independent claims, all of the dependent claims are also allowable over the cited references.

The Applicant respectfully submits that the present claims are in condition for allowance. On the basis of the above amendments and remarks, reconsideration and allowance of the application is believed to be warranted, and an early action toward that end is respectfully solicited. In addition, for any issues or concerns, the Examiner is invited to call the attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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September 23, 2006

By_____

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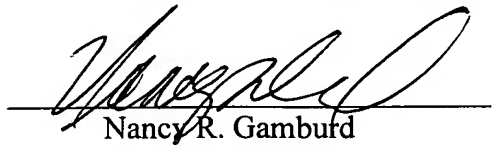
CERTIFICATE OF MAILING

I hereby certify that the foregoing Amendment and Response (10 pages), Transmittal (PTO/SB/21) (1 page), Fee Transmittal (PTO/SB/17) (1 page), Petition for Extension of Time (PTO/SB/22) (2 pages, original plus one copy), Check No. 1164 in the amount of $510, and Post Card Receipt, for Master, Paul L. et al., U.S. Patent Application Serial No. 10/022,776, entitled "Computer Processor Architecture Selectively Using Finite-State Machine for Control Code Execution", have been deposited in the United States Mail, First Class postage prepaid, addressed to the Commissioner for Patents, P.O. Box 1450, Mail Stop Amendment, Alexandria, VA 22313-1450, on September 23, 2006.



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